

# **CURRICULUM**

**REGULATION 2025**

**M.E. – POWER SYSTEMS ENGINEERING**

**- Working Professionals**

**SEMESTER**

**I TO IV**

**M.E. – POWER SYSTEMS ENGINEERING - FT – SEMESTER I TO IV**

**A. Foundation Courses (Credits-5)**

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1.	44725B01	ADVANCED MATHEMATICS FOR ELECTRICAL ENGINEERS	MATH	FC - BS	3	0	0	3	NIL
2.	44725H01	RESEARCH METHODOLOGY AND IPR	EEE	FC - HS	2	0	0	2	NIL

**B. Professional Core Courses (Credits-32)**

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1	44725C01	ADVANCED POWER SYSTEM ANALYSIS	EEE	CC	3	0	0	3	NIL
2	44725C02	POWER CONVERTERS FOR DISTRIBUTED GENERATION SYSTEMS	EEE	CC	3	0	0	3	NIL
3	44725C03	POWER SYSTEM DYNAMICS AND CONTROL	EEE	CC	3	0	0	3	NIL
4	44725C04	DIGITAL PROTECTION FOR POWER SYSTEM	EEE	CC	3	0	0	3	NIL
5	44725C05	TRANSIENTS IN POWER SYSTEM	EEE	CC	3	0	0	3	NIL
6	44725C06	EHV POWER TRANSMISSION	EEE	CC	3	0	0	3	NIL
7	44725C07	HVDC TRANSMISSION	EEE	CC	3	0	0	3	NIL
8	44725C08	POWER QUALITY	EEE	CC	3	0	0	3	NIL
9	44725C09	RENEWABLE ENERGY GENERATION METHOD	EEE	CC	3	1	0	4	NIL
10	44725C81	ADVANCED POWER SYSTEM SIMULATION LABORATORY	EEE	CC	0	0	4	2	NIL
11	44725C82	POWER SYSTEM SIMULATION LABORATORY	EEE	CC	0	0	4	2	NIL

**C. Elective Courses (Credits-19)**

**Professional Electives (Credits - 15)**

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1	44725P01	DISTRIBUTED ENERGY RESOURCES AND MICROGRID	EEE	EC-PS	3	0	0	3	NIL
2	44725P02	OPTIMAL CONTROL AND FILTERING	EEE	EC-PS	3	0	0	3	NIL

3	44725P03	WIND ENERGY CONVERSION SYSTEM DESIGN	EEE	EC-PS	3	0	0	3	NIL
4	44725P04	LINEAR AND NON-LINEAR SYSTEM THEORY	EEE	EC-PS	3	0	0	3	NIL
5	44725P05	ELECTRIC POWER DISTRIBUTION SYSTEM DESIGN	EEE	EC-PS	3	0	0	3	NIL
6	44725P06	PULSE WIDTH MODULATION FOR PE CONVERTERS	EEE	EC-PS	3	0	0	3	NIL
7	44725P07	RESTRUCTURED POWER SYSTEM	EEE	EC-PS	3	0	0	3	NIL
8	44725P08	SMART GRID TECHNOLOGIES	EEE	EC-PS	3	0	0	3	NIL
9	44725P09	ADVANCED MICRO CONTROLLER BASED SYSTEMS	EEE	EC-PS	3	0	0	3	NIL
10	44725P10	SCADA SYSTEM AND APPLICATIONS	EEE	EC-PS	3	0	0	3	NIL
11	44725P11	FACTS AND CUSTOM POWER DEVICES	EEE	EC-PS	3	0	0	3	NIL
12	44725P12	POWER SYSTEM RELIABILITY	EEE	EC-PS	3	0	0	3	NIL
13	44725P13	POWER SYSTEM SECURITY	EEE	EC-PS	3	0	0	3	NIL

### Open Electives – Interdepartmental Open Electives (Credits - 3)

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1	43325O01	BIO MEMS	ECE	OE - EA	3	0	0	3	NIL
2	43425O01	BIOMEDICAL PRODUCT DESIGN AND DEVELOPMENT	BME	OE - EA	3	0	0	3	NIL
3	40225O01	METAL ADDITIVE MANUFACTURING	MECH	OE - EA	3	0	0	3	NIL
4	48125O01	WASTE TO ENERGY	BTE	OE - EA	3	0	0	3	NIL
5	40925O01	ENVIRONMENTAL IMPACT ASSESSMENT	CIVIL-SE	OE - EA	3	0	0	3	NIL
6	41125O01	INDUSTRIAL SAFETY	MECH-ISE	OE - EA	3	0	0	3	NIL
7	41025O01	AGRO-FOOD SYSTEMS	BTE	OE - EA	3	0	0	3	NIL
8	41425O01	URBAN PLANNING AND SUSTAINABILITY	CIVIL-CEM	OE - EA	3	0	0	3	NIL
9	45125O03	ADVANCED CYBER SECURITY	CSE	OE-EA	3	0	0	3	NIL

### Open Electives – University Multidisciplinary Open Electives (Credits - 1)

1.	40625U01	DENTAL HYGIENE & QUALITY OF LIFE	Dentistry	OE-UOE	1	0	0	1	NIL
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2.	40625U02	NUTRITION FOR WELLNESS & SPECIFIC DISEASES	Nursing	OE-UOE	1	0	0	1	NIL
3.	40625U03	FUNDAMENTALS OF HOMOEOPATHY	Homoeopathy	OE-UOE	1	0	0	1	NIL
4.	40625U04	ADVERTISING	Arts & Science	OE-UOE	1	0	0	1	NIL
5.	40625U05	TEAMWORK & COLLABORATION	Arts & Science	OE-UOE	1	0	0	1	NIL
6.	40625U06	EMOTIONAL INTELLIGENCE	Arts & Science	OE-UOE	1	0	0	1	NIL
7.	40625U07	MEDIA MANAGEMENT	Arts & Science	OE-UOE	1	0	0	1	NIL
8.	40625U08	EXERCISE ESSENTIALS FOR PHYSICAL FITNESS	Physiotherapy	OE-UOE	0	0	2	1	NIL
9.	40625U09	ESSENTIAL SKILLS FOR MEDICAL EMERGENCIES	Medicine	OE-UOE	1	0	0	1	NIL
10.	40625U10	MEDICINE PLANTS IN DISEASE MANAGEMENT	Pharmacy	OE-UOE	1	0	0	1	NIL
11.	40625U11	BASIC LIFE SUPPORT	Allied Health Sciences	OE-UOE	1	0	0	1	NIL
12.	40625U12	MALLARKHAMBAM	Physical Education	OE-UOE	0	0	2	1	NIL
13.	40625U13	SILAMBAM	Physical Education	OE-UOE	0	0	2	1	NIL
14.	40625U1	BASIC FITNESS TRAINING	Physical Education	OE-UOE	0	0	2	1	NIL
15.	40625U15	RECREATIONAL GAMES	Physical Education	OE-UOE	0	0	2	1	NIL
16.	40625U16	INTRODUCTION TO LAW	Law	OE-UOE	1	0	0	1	NIL
17.	40625U17	FUNDAMENTALS OF LAW IN TECHNOLOGY AND CYBER SPACE	Law	OE-UOE	1	0	0	1	NIL
18.	40625U18	FOUNDATION COURSE IN YOGA	Rehabilitation And Behavior Sciences	OE-UOE	1	0	0	1	NIL
19.	40625U19	INTRODUCTION TO PSYCHOLOGY	Rehabilitation And Behavioral Sciences	OE-UOE	1	0	0	1	NIL
20.	40625U20	INTRODUCTION TO PUBLIC POLICY AND GOVERNANCE	Liberal Arts	OE-UOE	1	0	0	1	NIL
21.	40625U21	INDIAN ECONOMY AND DEVELOPMENT CHALLENGES	Liberal Arts	OE-UOE	1	0	0	1	NIL
22.	Course Code will be given after receiving SWAYAM Certificate	Any SWAYAM / MOOC / NPTEL Courses which are not related to the discipline of study of the student can be chosen as an Open Elective in Consultation with the respective Faculty Advisor of the Institution.		OE-UOE					

**D. Employability Enhancement Courses and courses for presentation of  
Technical skills related to the specialization (Credits-19)**

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1	44725RP1	PROJECT WORK PHASE -I	EEE	EE - P	0	0	12	6	NIL
2	44725RP2	PROJECT WORK PHASE -II	EEE	EE - P	0	0	24	12	NIL
3	44725D81	RESEARCH PRESENTATION SKILLS	EEE	EE -D	0	0	2	1	NIL

**E. MANDATORY COURSES (Credits-2\*\*)**

**\*\* The credits earned in category 'E' Courses will not be counted in CGPA calculation**

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1	44125Z81	ENGLISH FOR RESEARCH PAPER WRITING	ENG	AC	0	0	2	1	NIL
2	44125Z82	PERSONALITY DEVELOPMENT THROUGH LIFE ENLIGHTENT SKILLS	ENG	AC	0	0	2	1	NIL